The Chief Information Officer

Role of the Chief Information Officer

The role of the Chief Information Officer (CIO) has been evolving ever since the concept of a chief (or senior executive), responsible in some manner for the use of automation to transform organization business processes, became current in the late 1980's and early 1990's.

A central coordinating role for technology developed for a number of reasons.

The power of automation to improve processes and service delivery is one aspect of the desire to understand and utilize this new tool. The cost of acquiring the necessary hardware and software applications, particularly for more complex applications, made the investment in technology a potentially high-risk decision for any organization. A third aspect of a central coordinating office was the desire to encourage (or mandate) cooperation across the various government ministries and programs to avoid duplication and expenditures on technology.

The CIO, like the Comptroller General and other central agency executive officers, must adopt a corporate or horizontal view across the various government ministries and programs. The horizontal emphasis attempts to provide some counter-balance to the vertical or ministry (program) perspective that has been the traditional organization structure in all organizations. The vertical structures can be organized by product, by function (e.g. finance, personnel, service), by client group, by geography or a number of other principles.

Basic horizontal functions usually include general policy and procedures to control the vertical delivery units – such as financial controls or personnel procedures. Applying these control features to technology is more difficult because of the rapidly changing nature of information technology – both hardware innovations and software including operating systems and specific application development languages.

The BC Government has had central agencies for many years. Some, such as the Treasury Board Secretariat, the Comptroller General or the Public Service Agency, focus on procedures. Other agencies, such as the BC Buildings Corporation, are established to provide a central expertise and lower cost of operations through economies of scale.

One group of central agencies define what the ministry and operational programs can (or cannot do), while the second group is designed to reduce the overall cost of operations through central provision of common services. The roles and objectives of these organizations are more clearly defined than that of the Chief Information Officer, in that the CIO has limited legislative or delegated authority over operational matters, and a very indirect authority over ministry plans or budgets respecting information management (IM) information technology (IT).

The Horizontal vs. Vertical Balance

The CIO has delegated authority, through the Core Policy, to establish corporate policies, standards and guideline respecting information and technology management privacy and security. In this regard the position is similar to other central officers. However, the rapidly evolving nature of IT and information management (IM) made the establishing of detailed standards risky, as new innovations quickly make current technology obsolete.

The desire to reduce expenditures on IM/IT also has led to a view among some that the CIO should control all expenditures on major IM/IT expenditures – even to the point of actually managing the development of specific applications. This perspective, while professing to place program delivery needs first, in reality disrupts the traditional authority–responsibility relationship, which properly rests with program managers and deputy ministers. This led to conflicts between the CIO and ministries.

Conflict often can be replaced by a cooperative approach where the CIO can promote a corporate perspective through other methods, which are more difficult than direct management, but are more sustainable in the longer term.

Key Roles for the CIO

The CIO must define the corporate requirements for IM/IT, and assist the ministry and program managers to achieve their service objectives as well as promoting the corporate or government objectives.

This alignment of corporate and ministry objectives in the field of IM/IT will be accomplished through four key areas of activity:

1. Assist in the establishment of, and monitor progress toward, the government's vision of the full application of technology to its operation (e-government).

   The CIO must coordinate and lead the utilization of technology to improve government operations and services.

2. Promote an orientation to data sharing and boundless flows of information through a corporate approach to application development, while ensuring the protection of privacy.

   An important objective of the CIO is to champion the development of corporate technology applications to advance the goals of improved service and lower cost. However, the CIO is also provided the authority to ensure that personal privacy is protected.

3. Ensure the security of the government's information and applications are maintained at the highest possible level.

   The government relies on a reliable and secure information technology system to conduct its business. The security of the operating systems must be maintained to ensure confidence for all government operations, and the reliability of the information.

4. Provide research and policy advice to government respecting IM/IT trends, and provide information and support to ministries to promote improved business practices through the use of IM/IT.

   A research and policy function will guide future technology directions and priorities. The CIO will assist ministries in the development of their specific IM/IT plans, through the Information Resource Management Plan process, and provide the necessary policy and standards oversight and approval where required.

Next Steps

The e-BC Strategy paper (May, 2004) provides a general statement of the government's plans respecting IM/IT, specifically with an emphasis on client centered service delivery. The CIO plan will follow and build on the important work that has been done to date through the e-BC Strategy and supporting documents.

The CIO short and mid-term plans will be based on a framework that connects specific applications and projects to four broad, government goals that are also central to the e-BC Strategy.

1. Enhanced service and/or access for citizens and business with regard to government programs.
2. Cost containment or reduction through the use of technology.
3. Improved internal government or program efficiency.
4. Promoting development of the provincial information management and information technology sectors.

The CIO will focus on confirming or amending policies and standards for IM/IT, especially in the area of protecting government records and personal information. The plan will ensure the highest possible level of security for the government's IM/IT infrastructure and applications.

The CIO is also responsible for the identity management project – the Government Authentication Project (GAP) – which is a vital potential common application that has major benefits to the future delivery of electronic services across core government and the broader public sector. The GAP project will be focused and a decision sought as to future directions and funding.

The Office of the CIO is also summarizing the current inventory of ministry projects and applications in the planning phase or in development. The purpose is to identify those with a corporate component that can be used to develop corporate linkages and which request or would benefit by the involvement of the Office of the Chief Information Officer.

Office of the Chief Information Officer
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